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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,773	08/15/2003	HAN-CHUNG LAI	8615-US-PA-1	1772
31561	7590	07/23/2004	EXAMINER	
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE			TOLEDO, FERNANDO L	
7 FLOOR-1, NO. 100			ART UNIT	
ROOSEVELT ROAD, SECTION 2			PAPER NUMBER	
TAIPEI, 100			2823	
TAIWAN			DATE MAILED: 07/23/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/604,773

**Applicant(s)**

LAI, HAN-CHUNG

**Examiner**

Fernando L. Toledo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 7-9 is/are allowed.  
6) ☒ Claim(s) 1-6 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 15 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☒ Certified copies of the priority documents have been received in Application No. 10/248,404.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 5 – 7 and 13 – 18 have been renumbered 1 – 9, respectively.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Ozaki et al. (US Patent Application Publication US 2002/0131010 A1).

In re claims 1 and 4, Ozaki discloses, in the US Patent Application Publication US 2002/0131010 A1; figures 1 – 30D and related text providing a pixel structure including a thin film transistor 121, a pixel electrode 113, a scan line 103, a data distributing line 101, a

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conductive line 115 underneath the data distributing line, a first dielectric layer 123 isolating the conductive line and the data line electrically, and a second dielectric layer 143 covering the data distributing line, wherein the conductive line has a connective section and repair sections at each end of the connective section, and the repair sections cover an area larger than the data distributing line (Figure 27B); forming a first opening 154 and a second opening 154 in the first and second dielectric layers above the repair sections so that a portion of the data distributing line and the respective repair sections are exposed (Figure 27B); and forming a conductive layer 156 over the exposed surface of the first opening and the second opening so that the respective repair sections and the data distributing line are electrically connected (Figure 27B).

4. In re claims 2 and 5, Ozaki discloses wherein the step of forming the first and the second opening includes conducting a laser burning operation (Paragraph 0070).

5. In re claims 3 and 6, Ozaki discloses wherein the step of forming the conductive layer includes conducting a laser chemical vapor deposition (laser-CVD) including the sub-steps of: providing a reactive gas; and shining laser pulses at the reactive gas so that the reactive gas is activated to deposit into the opening to form the conductive layer (Paragraph 0080).

***Allowable Subject Matter***

6. Claims 7 – 9 are allowed over the prior art of record.

7. The following is a statement of reasons for the indication of allowable subject matter: Ozaki substantially discloses the claimed invention. However, Ozaki does not disclose, teach or suggest forming an opening in the dielectric layer above the broken region so that the broken

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region and the distributing line at each end of the broken region are exposed; and forming a conductive layer over the exposed broken region and the distributing line at the end of the broken region. Ozaki discloses forming two holes at the distributing line on each side of the broken region. There is no motivation that could properly suggest modifying the invention of Ozaki to expose the broken region. Therefore the claimed invention as a whole is neither anticipated nor rendered obvious over the prior art of record.

### ***Conclusion***

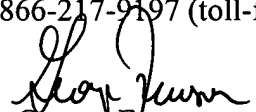
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art in the PTO-892 discloses various methods of laser repairing a broken line in a TFT-LCD device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fernando L. Toledo whose telephone number is 571-272-1867. The examiner can normally be reached on Mon-Thu 7am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 571-272-1855. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



George Fourson  
Primary Examiner  
Art Unit 2823

FToledo  
21 July 2004